

REMARKS

Claims 1-11 remain pending herein for which favorable reconsideration and allowance are requested.

As a procedural note, the present amendment is being filed concurrently with a formal Request for Continued Examination (RCE) under 37 CFR §1.114. Accordingly withdrawal of the "finality" of the May 12, 2006 Official Action is in order so as to allow entry and consideration of the amendments and remarks presented herewith.

I. Response to 35 USC §112 Issue

Claim 7 has been amended so as to address the Examiner's rejection advanced under 35 USC §112, second paragraph. Specifically, the preamble expression has been changed to clarify that the nucleating agent "consists of" the phosphoric acid aromatic ester metal salt nucleating agent having the attributes as claimed. Withdrawal of the 35 USC §112, second paragraph rejection is therefore in order.

II. Response to 35 USC §103(a) Rejections

(a) Rejection Based on Nakamura et al '715

Nakamura et al '715 is an inappropriate reference to reject claims 1-11 under 35 USC §103(a).

Applicants note that Nakamura et al '715 has a patenting date which are *after* the filing date of the applicants' International Application PCT/JP00/03912 on June 15, 2000 which designated the United States. Since the subject application is the timely filed US national phase of the international application PCT/JP00/03912, it is statutorily entitled (35 USC §363) to the filing date in the United States of such international application – namely, June 15, 2000.

Attached hereto is a *certified* English-language translation of the underlying Japanese priority application JP 1999/168864. Thus, it is clear that the present invention is entitled to an effective date of at least that of the JP 1999/168864 priority application. Therefore, Nakamura et al '715 is inappropriate as a reference against claims 1-11 under 35 USC §102(e).

Applicants also note that claim 1 of Nakamura et al '715 defines a polypropylene resin composition which exhibits a melt index falling within a certain specified range and a specific relationship between elongation viscosity and melt index. (See, column 2, lines 21-24.) Thus, according to Nakamura et al '715 a special propylene polymer having a special intrinsic viscosity (see e.g., column 4, line 27 through column 6, line 6) should be used. As for a nucleating agent embraced by the claims of the present application to be added to such special propylene polymer, however, Nakamura et al '715 is completely silent.

While the nucleating agent of formula (2) appearing at column 6, of Nakamura et al '715 does in fact have the same structure as Formula (I) of the subject application, it is really at this juncture that the similarities cease. Specifically, in Nakamura et al '715 a variety of nucleating agents can be used as described at column 5, lines 36-43. Especially, "dibenzylidenesorbitol or its derivatives" may be dispersed into the propylene resin and fuse when added to the polymer melt since such nucleating agents fuse at the polymer melt temperature. Since these nucleating agents as describe din Nakamura et al '715 fuse at the polymer melt temperature, the ordinarily skilled person would recognize that the aspect ratio and bulk specific gravity – attributes which are quite important according to the present invention – would be without meaning in the contexts of Nakamura et al '715. On the other hand, the phosphoric acid aromatic ester metal salts of the present invention do not fuse at 250°C. Therefore, their use would be unobvious in the context of the Nakamura et al '715 disclosure.

Withdrawal of the rejection of record under 35 USC §103(a) based on Nakamura et al '715 is therefore in order.

(b) Rejection Based on Takahashi et al '275

Takahashi et al '275 is an appropriate reference to reject claims 1-11 under 35 USC §103(a).

Applicants note that Takahashi et al '275 has a patenting date which are *after* the filing date of the applicants' International Application PCT/JP00/03912 on June 15, 2000 which designated the United States. Since the subject application is the timely filed US national phase of the international application PCT/JP00/03912, it is statutorily entitled (35 USC §363) to the filing date in the United States of such international application – namely, June 15, 2000.

Attached hereto is a *certified* English-language translation of the underlying Japanese priority application JP 1999/168864. Thus, it is clear that the present invention is entitled to an effective date of at least that of the JP 1999/168864 priority application. Therefore, Takahashi et al '275 is inappropriate as a reference against claims 1-11 under 35 USC §102(e).

Takahashi et al '275 also cannot properly be applied as a reference against the present claims since it is disqualified as a reference under 35 USC §103(c). In this regard, the present application and Takahashi et al '275 are commonly owned by Asahi Denka Kogyo KK as evidenced in the USPTO assignment records. See in this regard the assignments recorded at Reel 010172 and Frame 0534 for Takahashi et al '275 and the assignments recorded at Reel 014820 and Frame 0128 for the subject application. And, as noted previously, Takahashi et al '275 rises to the status of prior art *only* under 35 USC §102(e).

In addition to the assignment evidence in the USPTO's records, the following definitive statement is submitted pursuant to MPEP §706.02(I)(2) so as to establish common ownership:

The above-identified application and Takahashi et al '275 were, at the time the invention was made, owned by, or subject to an obligation of assignment to, the same person, namely, Asahi Denka Kogyo KK.

Therefore, since the subject application was filed subsequent to November 29, 1999, the effective date of 35 USC §103(c), and since Takahashi et al '275 can only rise to "prior art" status against the subject invention under 35 USC §102(e), then 35 USC §103(c) disqualifies Takahashi et al '275 as a reference against the claims pending herein.

Withdrawal of the rejection of record under 35 USC §103(a) based on Takahashi et al '275 is therefore in order.

(c) Rejection Based on Nakahara et al '113

The claims of the present application specifically require that the nucleating agent of the present invention possess the following *physical* characteristics:

- an average major-axis length of 10 μm or less;
- an average aspect ratio of 10 or less; and
- a bulk specific gravity of at least 0.1.

As described in the originally filed specification, the present applicants have discovered that having a relatively small average major-axis length and average aspect ratio and the required bulk specific gravity (e.g., which may be obtained by pulverizing

crystals of the nucleating agent in the manner described), various important mechanical properties ensue when the nucleating agent is incorporated into a crystalline synthetic resin.

Nakahara et al '113 does **not** disclose or suggest such critical structural characteristics as defined in the present applicants' claims. Stated another way, while chemically the nucleating agents disclosed in Nakahara et al '113 and those defined in the applicants' claims may be similar, there is no disclosure in Nakahara et al '113 of pulverizing the nucleating agents to achieve the distinct **physical** characteristics as defined in applicants' claims.

Specifically, Nakahara et al '113 discloses bisphenol phosphates having a special chemical structure which can improve the clarity of polyolefin resin compositions. However, Nakahara et al '113 does not disclose or suggest any advantages that may be attributable to either the aspect ratio of the bulk specific gravity of the nucleating agent. Thus, while a skilled person in the art may realize that it would be advantageous to employ a nucleating agent having a relatively small diameter so as to improve the clarity of a resin composition, it would **not** be obvious at all for such a person to select a nucleating agent having the specific aspect ratio and bulk specific gravity attributes as claimed in the present application. As such, the presently claimed invention is unobvious from the disclosure in Nakahara et al '113.

As further evidence of the **unobviousness** of the present invention vis-à-vis Nakahara et al '113, the Examiner is again invited to review the Declaration of Mr. Tohru Haruna which was submitted with the applicants' Supplemental Amendment dated March 29, 2006.¹ In this regard, the nucleating agent employed in Comparative Example 1 of the present application is the same nucleating agent that was employed in Examples 1, 17, 28, 24, 39 and 46 of Nakahara et al '113. This direct comparison of

nucleating agents therefore provides compelling evidence of the **unobviousness** of the presently claimed invention over Nakahara et al '113.

Withdrawal of the rejection advanced under 35 USC §103(a) based on Nakahara et al '113 is therefore in order.

III. Response to Double Patenting Rejections

(a) Rejection Based on Takahashi et al '275

For the reasons discussed above in section II(b), applicants submit that the presently claimed invention is patentably unobvious over the claims which issued in Takahashi et al '275.

In further response, applicants' assignee is enclosing herewith a Terminal Disclaimer which disclaims that portion of any patent issuing hereon which may extend beyond the expiration date of Takahashi et al '275. Additionally, the Terminal Disclaimer filed herewith also includes a provision that the patent issued hereon shall be enforceable only for and during such period that legal title thereto is the same as the legal title to Takahashi et al '275.

While applicant does not concur with the Examiner's position that the improvement sought to be patented herein is merely a matter of obvious choice or design as compared to the invention claimed in Takahashi et al '275, applicant wishes to point out that, in situations such as this, the issue is not one of "obviousness", but rather one of "identity of invention." *In re Vogel*, 164 USPQ 619 (CCPA 1970), *In re Kaplan*, 229 USPQ 678 (Fed. Cir. 1986). The Court in *Vogel* set forth the test for identity of invention as whether the claims of one case could be literally infringed without literally infringing the claims of the other. It is quite apparent that one of the claims of

¹ Curiously, the applicants can find no mention of the previously submitted Haruna Declaration in

Takahashi et al '275 and a claim of the present application could be infringed literally without infringing literally the claims of the other. Hence, there is no "identity of invention" so that the Terminal disclaimer enclosed herewith should, in any event, resolve the asserted issue of "double patenting".

Withdrawal of the double patenting rejection advanced on the basis of Takahashi et al '275 is therefore in order.

(b) Rejection Based on Nakahara et al '113

The discussion above with respect to the unobviousness of the presently claimed invention vis-à-vis Nakahara et al '113 and the evidence of unobviousness submitted by virtue of the Haruna Declaration are equally germane to the issue of obviousness-type double patenting based on claim 1 of Nakahara et al '113. Stated again, it would *not* be obvious at all for an ordinarily skilled person to select a nucleating agent having the specific aspect ratio and bulk specific gravity attributes as claimed in the present application based on Nakahara et al '113. As such, claims 7-11 are patentably unobvious over claim 1 of Nakahara et al '113. Withdrawal of the asserted double patenting rejection based thereon is therefore in order.

IV. Conclusion

Every effort has been made to advance prosecution of this application to allowance. Therefore, in view of the amendments and remarks above, applicant suggests that all claims are in condition for allowance and Official Notice of the same is solicited.

HARUNA et al
Serial No. 10/009,304
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Should any small matters remain outstanding, the Examiner is encouraged to telephone the Applicants' undersigned attorney so that the same may be resolved without the need for an additional written action and reply.

An early and favorable reply on the merits is awaited.

Respectfully submitted,

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